

- B1 8 d) sputtering a second magnetic layer on and in contact with the first magnetic layer,
9 the second magnetic layer having a second alloy composition which differs from the first alloy
10 composition and a second coercivity which differs from the first coercivity, whereby a coercivity
11 of the two magnetic layers is different than the first and second coercivities and is determined by
12 the relative thicknesses of the two magnetic layers; and
13 e) sputtering a third magnetic layer on the second magnetic layer.

B2 1 8. (Amended) The method as defined by claim 3 wherein step b) includes providing an
2 underlayer that is chromium or a chrome alloy.

B3 10. (Amended) The method as defined by claim 1 wherein step a) includes providing a
2 substrate that is nickel phosphorus or ceramic glass, and step b) includes providing an underlayer
3 that is chromium or a chrome alloy.

B4 1 11. (Twice Amended) A magnetic recording medium, comprising:
2 a substrate;
3 an underlayer supported by the substrate;
4 a first magnetic layer on the underlayer, said first magnetic layer having first alloy
5 composition that includes Pt and a first coercivity; and
6 a second magnetic layer on and in contact with the first magnetic layer, the second
7 magnetic layer having a second alloy composition that includes Pt which differs from the first
8 alloy composition and a second coercivity which differs from the first coercivity, whereby a
9 coercivity of the two magnetic layers is different than the first and second coercivities and is
10 determined by a relative thickness of the first magnetic layer to the thickness of the two magnetic
11 layers.

B5 1 20. (Twice Amended) A method for establishing a coercivity of magnetic recording
2 material on a substrate comprising the steps of providing a substrate and at least two cobalt based
3 alloy magnetic layers sputtered in sequence on the substrate and in contact with one another,
4 wherein the first magnetic layer has a first quaternary alloy composition and a first coercivity, the

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5 second magnetic layer has a second quaternary alloy composition and a second coercivity, with
6 the relative thicknesses of the two magnetic layers determining the coercivity, and the coercivity
7 being different than the first and second coercivities.

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1 21. (Amended) A magnetic recording medium, comprising:
2 a substrate;
3 a first magnetic layer over the substrate, wherein the first magnetic layer has a first alloy
4 composition and a first coercivity; and
5 a second magnetic layer on and in contact with the first magnetic layer, wherein the
6 second magnetic layer has a second alloy composition and a second coercivity, the first and
7 second alloy compositions are different, the first and second coercivities are different, a
8 coercivity of the medium is different than the first and second coercivities, and varying a
9 thickness fraction of the thickness of the first magnetic layer to the thickness of the first and
10 second magnetic layers has a significant effect on the coercivity of the medium with little or no
11 effect on the remanence of the medium.

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1 31. (Amended) A magnetic recording medium, comprising:
2 a substrate;
3 a first magnetic layer over the substrate, wherein the first magnetic layer has a first alloy
4 composition and a first coercivity and is sputter deposited over the substrate under a first
5 deposition condition that includes a temperature and bias of the substrate; and
6 a second magnetic layer on and in contact with the first magnetic layer, wherein the
7 second magnetic layer has a second alloy composition and a second coercivity and is sputter
8 deposited on the first magnetic layer under a second deposition condition that includes a
9 temperature and bias of the substrate, the first and second alloy compositions are different
10 compositions that contain Co and Pt, the first and second coercivities are different, the first and
11 second deposition conditions are the same, and a coercivity of the medium is different than the
12 first and second coercivities.

B80 39 (Amended) The magnetic recording medium as defined by claim 31 wherein varying
a thickness fraction of the thickness of the first magnetic layer to the thickness of the first and
second magnetic layers has a significant effect on the coercivity of the medium with little or no
effect on the remanence of the medium.

B9 41 (Amended) A magnetic recording medium, comprising:
a substrate;
a first magnetic layer over the substrate, wherein the first magnetic layer has a first alloy
composition and a first coercivity; and
a second magnetic layer on and in contact with the first magnetic layer, wherein the
second magnetic layer has a second alloy composition and a second coercivity, the first and
second alloy compositions are different quaternary alloy compositions, the first and second
coercivities are different, and a coercivity of the medium is different than the first and second
coercivities.